Background Ozone Study Bill of 2019

Congressman McAdams is preparing to introduce legislation with the goal of understanding and addressing air pollution in Utah. Background ozone is a major contributing factor to poor air quality along the Wasatch Front and across the U.S., however, we lack standardized definitions for ozone, as well as a lack of modeling to help us understand what sources and where they contribute the most to ground-level ozone.

Summary- This bill will enable the Environmental Protection Agency to work with the National Academies of Science, Engineering, and Medicine (NAS) to produce scientific findings examining background ozone in the United States and provide recommendations to Congress to better understand and mitigate ozone contributions to ground-level ozone. Ground level ozone is a combination of nitrogen oxides (a naturally occurring compound) and volatile organic compounds (emissions from vehicles, power plants, industrial process, wildfire, and additional human caused pollutants) reacting with ultraviolet radiation form the sun. Ground level ozone is a main component to Salt Lake Valley's air quality and visibility issues.

Bill Components and Directives-

The first section will include a number of findings:

1) Expanding on and explaining ground-level ozone as a dangerous, human-produced compound that is the primary component to smog and has massively harmful effects on people and the environment.
    a. American Thoracic Society estimated 3,330 ozone related deaths in 2017, and 75 in Salt Lake Valley alone.
2) Ground level ozone has also been linked to plant and crop damage, resulting in diminished yields and less productive crops.
3) National Ambient Air Quality Standards (NAAQS) require certain standards for ground-level ozone, which few cities and regions in the US meet, including Salt Lake and the Wasatch front, which are considered severely non-compliant. These standards, which are measurements meant to improve human health and environmental impact, are difficult to meet due to the high levels of ozone production from sources like vehicles, wildfire, and power plant production.
4) There are significant uncertainties and a lack of understanding in characterizing ozone trends and how they relate to a slowdown in air quality improvements observed in the last 10 years. To put it simply, despite increasing standards based on health and environmental concerns, there is still a lack of compliance and actually an increase in ozone emissions, and we do not know where they are specifically coming form.

The second section of the bill will outline the study, conducted by the National Academies of Science:

1) Examines the science of current trends in background ozone and how it contributes to ground-level ozone
    a. Current trends of non-natural sources, including international sources
    b. Human cause climate change affecting background ozone
2) Examines the current set of challenges in quantifying sources and contributions of background ozone and ground-level ozone on a regional scale and makes public policy recommendations for decision makers due to a lack of data or modeling capability currently available.
3) Recommendations for research and development efforts that would support the analysis demonstrated in the study and which identify pathways for applying results to accelerate
4) Identifies opportunities for international engagement that might facilitate collaboration

The final section of the bill instructs the EPA administrator to share findings with Congress no later than two years after the bill is enacted.